

U.S. DEPARTMENT OF TRANSPORTATION
WASHINGTON, D.C. 20590

STATEMENT BY WILLIAM J. BURNS, DIRECTOR, OFFICE OF HAZARDOUS MATERIALS, DEPARTMENT OF TRANSPORTATION, BEFORE THE SPECIAL SUBCOMMITTEE ON INVESTIGATIONS, HOUSE COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE, THURSDAY, APRIL 25, 1974.

Mr. Chairman and Members of the Subcommittee:

I appreciate this opportunity to meet with you to discuss the Department of Transportation's hazardous materials program. As requested by the Subcommittee staff, the bulk of my remarks will be addressed to the function of the Office of Hazardous Materials ("OHM"), but I would like to stress that the hazardous materials function is a Department-wide program and that OHM is only one part of that program. I hope my discussion will give you some idea of the magnitude of the Department's commitment to the hazardous materials program. Today, I will discuss the following:

1. A basic overview of the hazardous materials program, the function of the OHM, and the field and various inspections staffs of the Department.
2. The amount of hazardous materials transported in the United States, generally.
3. The amount of radioactive materials transported in the United States.
4. A review of the Department's inspection activities.
5. The Department's training program.
6. The new hazardous materials legislation, proposed by the Department.

Basic Overview

The authority for hazardous materials is placed by statute with the Secretary of Transportation and with the various modal administrations -- the Coast Guard, the Federal Aviation, Federal Highway, and Federal Railroad Administrations. Attached to this testimony is a copy of the Departmental order which more fully describes the functions of the Secretary's Office and the Administrations. Very briefly, the Administrations have the signatory authority for our hazardous materials regulations. OHM does not have any signatory authority, but rather assists the Administrations and aids in the coordination of the program. OHM prepares certain of the hazardous materials regulations, and participates in data collection, training and education, interagency coordination, international liaison, internal coordinations, and surveillance of shippers and manufacturers. The modes also carry on their own educational, inspection and similar programs.

As for a field inspection force, OHM has allocated 2 man-years. These men are taken from the total staff at OHM. OHM has 37 persons on its staff, consisting of 28 professionals and 9 clerical. It is the modes, however, which supply the great part of the field force. The Bureau of Motor Carrier Safety, Federal Highway Administration, has 2 professionals with clerical support in their headquarters devoted exclusively to hazardous materials. There are 9 full-time hazardous materials field inspectors and 121 safety inspectors who devote 10 percent of their time to hazardous materials for a total of 21 man-years of effort relating to carrier and shipper activities.

The Office of Safety, Federal Railroad Administration, has in their headquarters 2 full-time hazardous materials staff personnel with clerical support for hazardous materials. There are 17 full-time hazardous materials inspectors and 94 safety inspectors who devote 20 percent of their time to hazardous materials for a total of 35 man-years of effort combining carrier and shipper activities.

Flight Standards Service, Federal Aviation Administration, has in their headquarters 3 full-time hazardous materials staff personnel with clerical support for hazardous materials. There are 18 full-time hazardous materials coordinators who supervise and assist 102 inspectors who devote 5 percent of their time to hazardous materials for a total of 26 man-years of effort combining carrier and shipper activities.

The Cargo and Hazardous Materials Division, Office of Merchant Marine Safety, United States Coast Guard, has 5 full-time professional staff with clerical support devoted to the package portion of the hazardous materials function. In addition, as circumstances warrant, approximately 50 professional staff of a number of disciplines are available in Coast Guard headquarters to assist in this function. It is estimated that at least 8 man-years are devoted to this program. There is a much larger number of personnel dealing with the bulk shipment of hazardous materials. There are 55 full-time dangerous cargo officers and 1,195 other field personnel who devote an estimated 10 percent of their time to packaged hazardous materials for a total of 145 man-years of effort encompassing carrier and shipper activities.

Amount of Hazardous Materials Transported Generally

From best estimates available to OHM, 1,784 million tons of hazardous materials were shipped in 1967. It is projected that by 1980

a total of 2,755 million tons of hazardous materials will be shipped annually. By extrapolating from these figures, it is estimated that approximately 2,265 million tons of hazardous materials were transported during 1973. These estimates are contained in a report entitled "An Appraisal of the Problem of the Handling, Transportation and Disposal of Toxic and Other Hazardous Materials," prepared and published by Booz-Allen and Hamilton in January 1970. A breakdown of the estimated amounts of hazardous materials transported by each mode of transportation for the period 1967-1980 is set forth in Appendix A of this statement.

Amount of Radioactive Materials Transported

With respect to packages of radioactive materials, there were approximately 17,000 tons produced and transported in 1968 with an expected increase to 163,000 tons by 1980. By extrapolating from these figures, it is estimated that approximately 65,000 tons were produced and handled during 1973. Based on these figures the production and transportation of radioactive materials is increasing by about 22.8 percent per year. Appendix B to this statement sets forth by mode of transportation the estimated number of radioactive materials packages transported during the years 1971-1973. These estimates of the number of packages shipped during the past three years are based on surveys of manufacturers and shipping points.

Packages of radioactive materials transported by air are normally small packages containing radioisotopes, radiopharmaceuticals and other materials utilized in numerous medical treatments. One out of every 9 hospital patients is treated by some form of radioactive material as a necessary life maintenance procedure. These types of materials have

a very short half-life. Unless transported by air, or for short distances by highway, many patients would be unable to readily receive these treatments.

Inspection and Enforcement Activities

As I indicated before, the hazardous materials function is Department-wide, and this is true of the inspection program. During calendar year 1973, the Office of Hazardous Materials conducted 699 surveillance visits to 233 shipper facilities, 56 new container manufacturers, 133 drum reconditioners, 90 air carriers, 53 air freight forwarders, 46 motor carrier shipping docks, 40 railroad freight forwarders, 37 water carriers and 11 Government agencies.

As a result of these visits, there were 235 warning letters written concerning noncompliance with regulations dealing with documentation, labeling, marking of shipments, and the use of nonspecification containers. Nearly 6,000 unauthorized hazardous materials containers were observed at the various shipper facilities visited. The vast majority of these had not entered the transportation stream at the time of discovery. Based on these discoveries, at least 22,000 additional filled drums not authorized for the transportation of hazardous materials were located. These shipments were brought into compliance before being transported.

Surveillance visits conducted by OHM during 1973 were confined to a review of shipper practices and the practices of hazardous materials container manufacturers and reconditioners, and did not cover carrier operating practices.

The FHWA conducted inspection visits to carrier and shipper facilities. In 1973, there were 5,874 surveys made of shippers and carriers of which 1,563 related to hazardous materials. 859 of these surveys resulted in warning letters being served. There were 292 specification container inspections, 104 general and in-depth accident investigations. 1,275 violations were discovered during 954 hazardous materials vehicle inspections. As a result of these activities there were 62 complaint investigations and 57 reports filed on enforcement cases. 53 of the enforcement cases were concluded, resulting in \$64,520 being assessed.

The Federal Railroad Administration conducted 2,124 hazardous materials inspections. These consisted of 1,191 inspections of carrier operating facilities, 390 inspections of carrier billing facilities, 462 inspections of shipper facilities, and 81 inspections of container manufacturer facilities. 10 cases were referred to counsel for prosecution. Of the cases completed, 4 shippers were fined \$20,900, and 2 carriers were fined \$1,000.

The Federal Aviation Administration processed and completed 237 violations for noncompliance with the regulations. 103 of these violations were against carriers and 130 were against shippers. Administrative actions taken against carriers and shippers included 13 warning notices and 21 letters of correction to air carriers and 20 warning notices and 38 letters of correction to shippers. These discoveries resulted in large measure from 9,000 inspections of carrier facilities and practices, many of which involved hazardous materials. Total fines

assessed amounted to \$9,650 against carriers and \$14,600 against shippers.

The United States Coast Guard conducted 94,219 inspections of waterfront facilities and found violations in 1,671 of these inspections. There were 47,946 vessel boardings with violations found during 1,201 of the boardings. Approximately 6,000 inspections of bulk hazardous materials vessels take place each year in connection with the certification program for 3,992 vessels. Corrections are made as necessary for compliance without identifying such actions as violations. Of 111 bulk penalty cases, \$39,075 was collected in fines and of 103 packaging penalty cases \$65,950 was collected.

Training and Education Efforts

Extensive educational and training programs for hazardous materials are carried out in the Department. For instance, BMCS conducted 374 training sessions for carriers in FY 1973. I will only speak here about OHM's role. During 1973, OHM conducted or participated in 20 training and education seminars relating to hazardous materials. Seminars conducted by OHM consisted of 11 air-oriented seminars; 4 seminars involving the Defense General Supply Administration of the Department of Defense; one seminar concerning standards relating to the operation of the National Aeronautics and Space Administration; and one seminar covering basic hazardous materials standards. In addition, OHM participated in 3 seminars relating to compressed gases, compressed gas cylinders and tanks.

Also, numerous training guides and other handout materials were developed and distributed during 1973. These materials were furnished to both domestic and foreign individuals, governments and groups in an effort

to promote understanding of the hazardous materials regulations and promote further development of international standards.

Hazardous Materials Legislation Proposed by the Department

The Department has proposed and submitted a proposed bill (S. 2064) to amend the laws governing the transportation of hazardous materials (18 U.S.C. 831-835). This bill is currently pending before the Senate Committee on Commerce. In addition to providing for the use of the term "hazardous materials", S. 2064 would authorize civil penalties for violations by any mode of transportation, provide the Department with authority over the manufacturers of hazardous materials containers, and also amend the Department of Transportation Act (49 U.S.C. 1651 et seq.) by consolidating in the Secretary, with discretionary authority for redelegation, all the hazardous materials regulatory authority existing under 18 U.S.C. 831-835.

The Department believes that authority over the manufacturers and to impose civil penalties for violations of the hazardous materials laws by all modes of transportation will result in the more uniform and effective enforcement of those laws. In addition, the consolidation of all hazardous material authority in the Secretary with authority for discretionary rather than mandatory redelegations will provide the Secretary with the organizational flexibility necessary to promptly and effectively meet intermodal problems relating to the transportation of hazardous materials.

The Department urges the enactment of S. 2064 as a means to provide for the more effective regulation of the transportation of hazardous materials.

This completes my prepared statement. I will be happy to answer any of your questions.

Appendix A

Estimated Amounts of Hazardous Materials
Shipped by Mode, 1967-1980
(millions of tons)

	Highway	Water	Rail	Air	Liquid Pipeline
1967	512	414	149		709
1973 (estimated)	656	437	172	4.53	1,000
1980 (estimated)	800	470	195		1,290
% increase (1967-1980)	56.3%	13.5%	30.9%	.35%	81.8%
% increase in share of total amount shipped	.3%	(6.1%)	(1.3%)		7.1%

Total amounts shipped

1967 1,784
1973 2,265
1980 2,755

Appendix B

Estimated Number of Radioactive Packages
Transported by Mode, 1971-1973

	<u>Highway</u>	<u>Water</u>	<u>Rail</u>	<u>Air</u>
1971	135,000	600-1,500	1,200-2,500	600,000
1972	160,000	800-1,600	1,500-3,000	680,000
1973	180,000	1,000-2,000	2,000-4,000	780,000

Note: Packages of radioactive materials range in weight from a few ounces to several tons, thereby making a breakdown of radioactive materials shipments by weight virtually impossible.